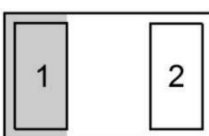
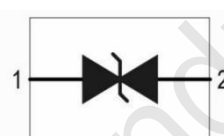
		1-Line Bidirectional ESD Protection Diode	DFN1006-2L						
schematic & pin configuration									
simplified outline		Graphic symbol							
									
<h3>General description</h3> <p>Low capacitance bidirectional Electrostatic Discharge (ESD) protection diode in a DFN1006(SOD882) leadless ultra small surface-Mounted Device (SMD) plastic package designed to protect one signal line from the damage caused by ESD and other transients.</p>									
<h3>Features and benefits</h3> <ul style="list-style-type: none"> · Bidirectional ESD Protection of one line · Femtofarad capacitance: $c_j = 65\text{PF}$ (TYP) · Low clamping voltage $V_c = 9.0\text{V}@30\text{A}$ (TYP) · Low leakage current: nA Level · ESD Protection up to 30 kv · IEC 61000-4-2; level 4 (ESD) · IEC 61000-4-5 (surge); $I_{ppM} = 30\text{A}$ 									
<h3>Application information</h3> <ul style="list-style-type: none"> · portable electronics · computers and peripherals · Audio and video equipment · cellular handsets and accessories · communication systems · power supplies 									
<h3>ordering information</h3> <table border="1"> <thead> <tr> <th>Device</th> <th>package</th> <th>packaging</th> </tr> </thead> <tbody> <tr> <td>ESD8B5.0C</td> <td>DFN1006-2L</td> <td>10000/Tape & Reel</td> </tr> </tbody> </table>				Device	package	packaging	ESD8B5.0C	DFN1006-2L	10000/Tape & Reel
Device	package	packaging							
ESD8B5.0C	DFN1006-2L	10000/Tape & Reel							

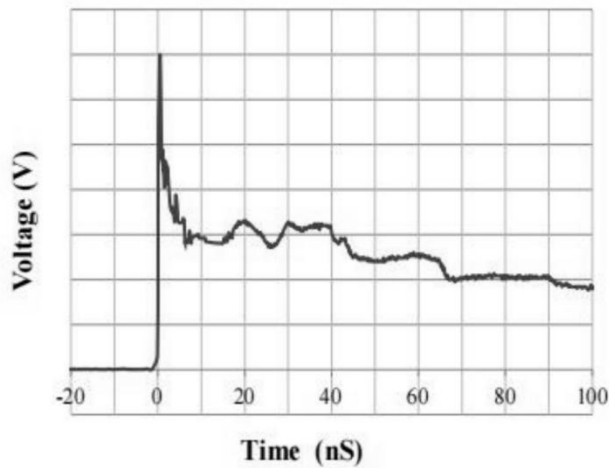
Maximum Ratings (TA = 25 °c, unless otherwise specified)

parameter	symbol	value	unit
peak pulse power (TP = 8/20 μ s)	PPPM	300	W
Rated peak pulse current (TP = 8/20 μ s)	I PPM	30	A
Maximum lead temperature for soldering during 10s	TL	260	. c
storage Temperature Range	Tstg	-55 to + 150	°C
operating Temperature Range	T _{OP}	-40 to + 125	°C
ESD Voltage IEC 61000-4-2 (air discharge)	VESD	30	kv
ESD Voltage IEC 61000-4-2 ocontact discharge)	VESD	30	kv

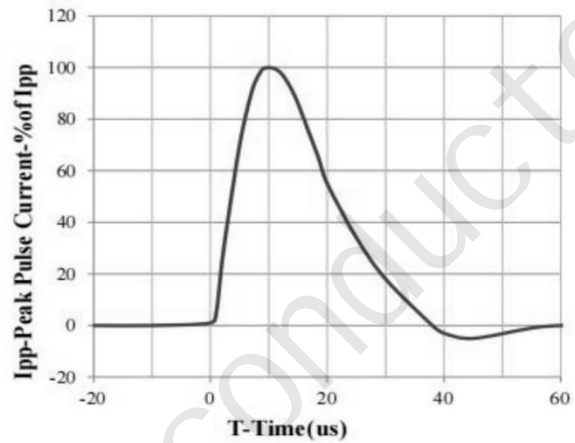
Electrical characteristics (TA = 25 C, unless otherwise specified)

parameter	sympo	Min	TYP	Max	unit	condition
Reverse working voltage	VRWM	--	--	5.0	V	
Breakdown voltage	VBR	5.6	--	7.0	V	IT= 1mA
Leakage current Leak	IR	--	--	100	nA	VRWM=5V
clamping voltage	V _C	--	6.5	7.0	V	Ipp= 10A, TP=8/20μS
clamping voltage	V _C	--	9	10	V	Ipp=30A, TP=8/20μS
Junction capacitance	C _J	--	65	80	PF	VR=0V, f= 1MHz

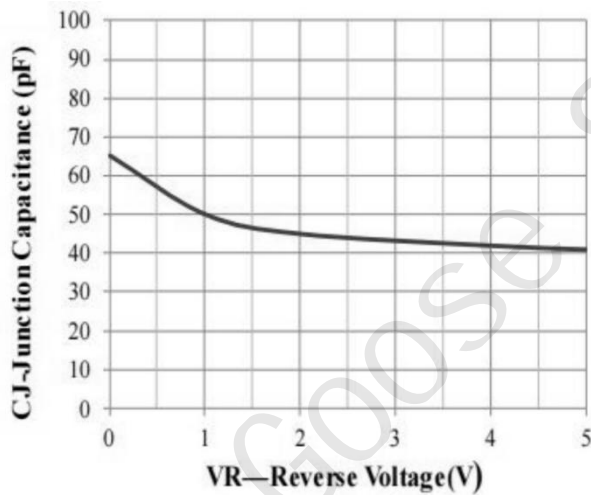
Typical performance characteristics (TA=25. c unless otherwise specified)



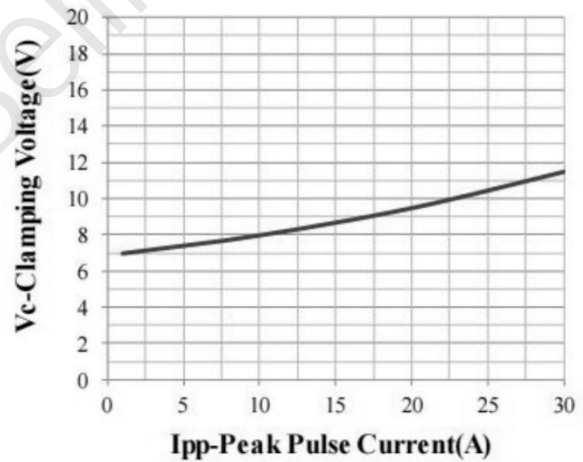
IEC61000-4-2 pulse waveform



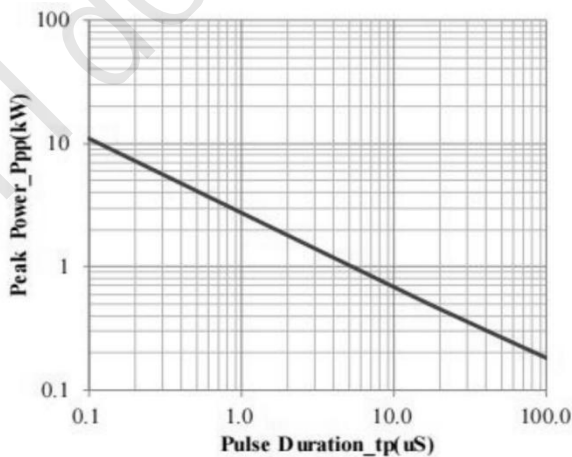
8 X 20us pulse waveform



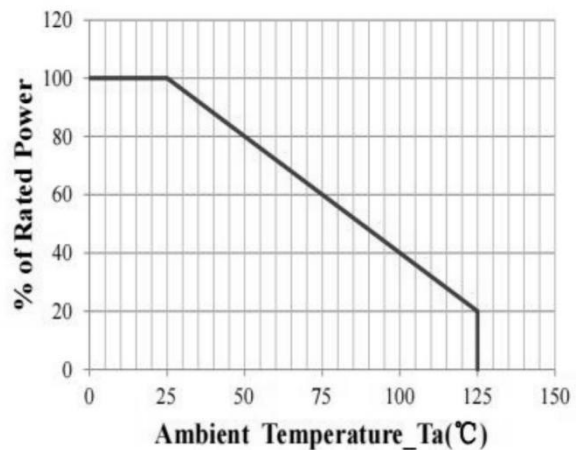
Junction capacitance vs. Reverse voltage



clamping voltage Vs. peak pulse current



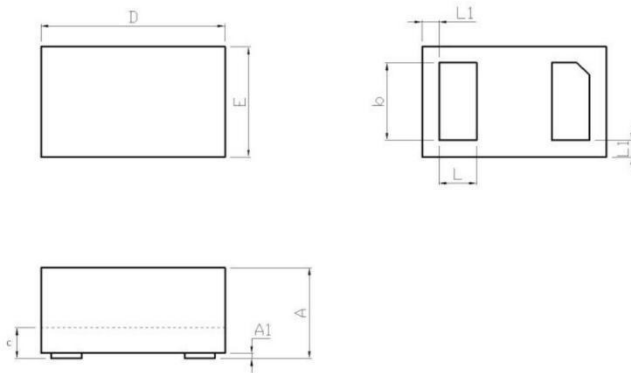
peak pulse power Vs. pulse Time



power Derating curve

package outline Dimensions

DFN1006-2L



DFN1006-2L (mm)		
Dim	Min	Max
A	0.35	0.55
A1	0	0.05
b	0.40	0.60
D	0.95	1.08
E	0.55	0.68
L	0.20	0.30
L1	0.035	0.065